

23rd NREL Industry Growth Forum

Bridging the Gap for Entrepreneurs & VCs

Denver, Colorado, October 19-21, 2010

INNOVATE • PARTNER • NETWORK • INVEST



Presenting entrepreneurs had 10 minutes to impress the judges and convince them that their business plans were sound and worthy of investment.

Entrepreneurs took center stage at the [23rd Industry Growth Forum](#) held in Denver October 19-21 by the U.S. Department of Energy's National Renewable Energy Laboratory.

Under hot lights, entrepreneurs took to the podium to make their best 10-minute pitch to a panel of astute judges — venture capitalists, fund managers, and potential partners — who have seen and heard it all before. All the while, a digital clock reminded them that time was passing.

Then came the really tough part — another 10 minutes of answering the judges' questions, absorbing their critiques, and hoping to attract the interest of the investors and strategic partners in attendance. The stakes are high — since 2003, companies presenting at the forum have raised more than \$3.5 billion.

The 2010 Entrepreneurial Companies

Seed Stage

- OsComp Systems
- infiniRel Corporation
- Tour Engine
- Enertaq
- May Ruben Energy Solutions
- Paper Battery Company
- ZERE
- PCM Innovations
- Linum Systems
- ReGreen Technologies

Early Stage

- Mission Motors
- MTPV
- Ideal Power Converters
- 7Solar Technologies
- VanDyne SuperTurbo
- Eco Power Solutions
- OPX Biotechnologies
- Pythagoras Solar
- Enovative Kontrol Systems
- Clarian Power
- Clean Power Finance
- brightLeaf Technologies
- Ocean Renewable Power
- Incenergy
- ThermalCentric
- ElectraTherm
- Solid Carbon Products
- Clean Coal Briquette
- Sunnovations
- Energy Materials Inc
- Clean Coal Briquette Inc

Premier Event for Clean Energy Start-Ups

In seven years, NREL's Industry Growth Forum has grown into one of the most respected venture events focused exclusively on companies developing clean energy products to serve electricity, buildings, and transportation infrastructures.

The Forum is the premier event for innovative clean energy start-up companies to meet venture capitalists, corporate investors, and strategic partners. This year, 200 clean energy entrepreneurs applied to participate. One hundred and thirty investors scored their products and plans, and 34 were selected to compete.

This year's companies ranged from very early and seed-stage start-ups to later-stage companies looking for expansion capital. The technologies represented spanned the spectrum from innovative thin-film PV technologies, energy storage devices, advanced engine systems, and wave technology, to new approaches to carbon capture and large-scale solar power production.

Financial and business executives mentored the firms in preparation for the event. At the forum, the companies pitched their business case and competed for the Best Venture Award.

One-on-One Partnering Session

A great addition to this year's forum was a dynamic One-on-One Partnering Session sponsored and co-organized by the MetroDenver

Economic Development Corporation and hosted in conjunction with the Environmental Business Cluster.

The session featured 45 leading strategic partners and investors who were available for 10-minute one-on-one meetings to offer advice and listen to business pitches. The meetings were open to all registered Forum attendees, innovators, and companies that applied to compete. This early networking helped launch discussions over the next two days.

The One-on-One meetings were a great success and had broad participation from the venture community as well as from large energy, biotechnology, and other multinational conglomerates (see "Partnering Participants" below). Before the afternoon was over, NREL had facilitated well over 500 individual meetings.

Themes Emerge

Panels and speakers covered a spectrum of topics, from strategies for obtaining financing and the significance of new market players to competing on a world stage and using product design as a differentiator. From these sessions, several common themes emerged (agenda available on the event [Web site](#)):

- **Importance of strategic partners and corporate investors.** Strategic partners have become a major source of capital and managerial know-how to support companies through early growth and scale-up. Investment professionals are stepping up their partnerships with public and private actors as the real costs of deploying a new and massive energy infrastructure become apparent.
- **The increased internationalization of cleantech activity, most notably in Asia.** During his Wednesday keynote, John Denniston, Partner with Kleiner Perkins Caufield & Byers, said China's investment in clean energy topped \$35 billion in 2009, compared with \$18 billion in the United States. Denniston said Chinese investment was set to increase tenfold over the next decade as the country's government aims to generate 15 percent of the nation's total energy from renewable sources by 2020. He also stressed that manufacturing in the U.S. is essential if renewable energy is to be a growth engine for our economy.
- **Focus on capital and time efficiency.** Capital and time efficiency were two issues raised throughout the forum. Reaching positive cash flow while consuming an acceptable amount of invested capital is increasingly important to limit shareholder dilution. Several panelists stressed that a capital spend plan should be a part of a company's commercialization plan and should be included in any presentation to investors.
- **The importance of design to competitive advantage.** Lionel Bony, Director at Rocky Mountain Institute, reminded the audience that studies illustrate that decisions made during the design period can determine 70% of the product's costs, while decisions made during production generally account for 20%. This is all the more true in

The 2010 Entrepreneurial Companies (cont.)

Later Stage

- Microstaq
- NanoMas Technologies
- ZeaChem
- Emissions Technology

Partnering Participants

Access Venture Partners
Altira Group
Applied Ventures
Andrews Kurth LLP
ARPA-E
Battelle Ventures
Battery Ventures
Bosch
BP Alternative Ventures
Braemar Energy Ventures
Brownstein Hyatt Farber & Schreck
Cascadia Capital
Chevron Technology Ventures
Chrysalix Energy Venture Capital
CMEA Ventures
Dow Venture Capital
Fairfield and Woods
Firelake Capital
General Electric
General Motors
Good Energies
Goodwin Procter LLP
Hamilton Clark Securities Company
Honda Strategic Venturing
Infield Capital
Kleiner Perkins Caufield & Byers
Lockheed Martin
Mohr Davidow Ventures
NV Institute for Ren. Energy Com.
New Enterprise Associates
NGP Energy Technology Partners
NREL
Nth Power
Pangaea Ventures
PG&E Corporation
Rockport Capital Partners
Siemens Venture Capital
Silicon Valley Bank
U.S. DOE, EERE
Wilson Sonsini Goodrich & Rosati
Xcel Energy
Yellowstone Capital

cleantech, where it's more difficult to release rapid successive product updates. Optimizing components in isolation tends to constrain the whole system.

- **The need to champion broad innovation across all sectors.** Alexis Madrigal, Senior Editor for *The Atlantic*, gave a fascinating keynote on the history of green tech, pointing out that it isn't easy to tell which new idea is brilliant and which is idiotic. Just about every new concept has had detractors, and technological claims once deemed absurd can become reality. Eric Giler, CEO of WiTricity, proved this point and wowed the crowd with a demonstration of wireless electricity, beamed from a base to a range of electrical devices. WiTricity is developing technology to safely transmit power wirelessly through the air, which will surely turn the industry on its head.

Award Winners

Three entrepreneurial companies were singled out from the 34 competitively selected presenters to win the 2010 Wilson Sonsini Goodrich & Rosati NREL Clean Energy Venture Awards.

Cash prizes included \$10,000 for Best Venture and \$5,000 each for the two Outstanding Venture Awards. NREL, along with Wilson Sonsini Goodrich & Rosati, will provide the winners with in-kind commercialization support to help increase their chances of commercial success.

MTPV, LLC (located in Austin, TX) took the top prize, receiving the Best Venture award. MTPV creates semiconductor chips that convert light and waste heat directly into electricity.

An Outstanding Venture award went to OPX Biotechnologies, Inc. (Boulder, CO). OPX Biotechnologies' EDGE (efficiency directed Genome Engineering) uses biotechnology to convert renewable raw materials into biochemicals and biofuels.

The second Outstanding Venture award went to Van Dyne SuperTurbo, Inc. (Fort Collins, CO). The Superturbo charger allows engines to meet stringent emission requirements while delivering outstanding engine performance.

Our Colorado Partners

The success of the Forum is a direct result of collaboration with our Colorado partners. State organizations and agencies played a critical role in planning and outreach to bring the most innovative entrepreneurs and investors to the forum. Additionally, our partners work tirelessly to keep the spotlight on the growing Colorado cleantech industry. This year we partnered with the Colorado Cleantech Industry Association (CCIA) to co-locate the inaugural Colorado Cleantech Awards Luncheon with the forum. The Luncheon was a great success with more than 360 attendees, including Senator Mark Udall and Governor Bill Ritter.

NREL would also like to thank and recognize the contributions of the Colorado Governor's Office, the MetroDenver Economic Development Corporation, the Office of Economic Development and International Trade and the Colorado Cleantech Industry Association. Our partners are our greatest assets.



This year's Best Venture winner was David Mather (center), President of MTPV, LLC. The two Outstanding Venture awards went to (left) Ed VanDyne, Founder and CEO of VanDyne SuperTurbo, Inc., and (right) Charles Eggert, President of OPX Biotechnologies, Inc.

Special Thank You

NREL extends thanks to all the moderators and panelists for their time and participation in the forum. We wouldn't have been able to put on such an ambitious event without the talents and time of so many individuals and organizations. We also extend a special thank you to all of our sponsors for their generous contributions. Finally, thank you to all who attended—we hope you benefitted from participating in this year's forum.

Join Us! Since 2003...

- Presenting companies have cumulatively raised a total of \$3.4 billion
- Within a year of presenting, companies have raised \$635 million
- Within two years, companies have raised \$1.12 billion
- 53.2% of the presenting companies (91 of 171) have received capital investments
- 25 strategic partnerships have been formed

NREL Growth Forum Contacts

L. Marty Murphy
Manager, Enterprise Development Program and
Forum Chairman
Telephone: 303-275-3050
Lawrence.Murphy@nrel.gov

2011 Could be Your Year!
The 24th NREL Industry Growth Forum
November 8 – 10, 2011
Denver, CO